UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
ROSARIO VASQUEZ, DENNIS

ART UNIT	PAPER NUMBER
2621	

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/900,506	KOTLIKOV ET AL.
	Examiner	Art Unit	
	Dennis Rosario-Vasquez	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amend. August 6, 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   The amendment was entered on August 6, 2004. Claims 1-44, as amended, or 1-

46, renumbered as requested below, are pending.

Claim Objections

2.   The following quotations of 37 CFR § 1.75(a) is the basis of objection:

> (a) The specification must conclude with a claim particularly pointing out and distinctly claiming
> the subject matter which the applicant regards as his invention or discovery.

3.   Claim 7 is objected to under 37 CFR § 1.75(a) as failing to particularly point out

and distinctly claim the subject matter which the applicant regards as his invention or

discovery.

4.   Claim 7, line 2:"the vicinity" ought to be amended to "a vicinity".

5.   Claim 9, line 3:"process sampling" ought to be amended to "process of

sampling".

6.   The numbering of claims is not in accordance with 37 CFR 1.126 which requires

the original numbering of the claims to be preserved throughout the prosecution. When

claims are canceled, the remaining claims must not be renumbered. When new claims

are presented, they must be numbered consecutively beginning with the number next

following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 36 been renumbered 38.

Misnumbered claim 37 been renumbered 39.

Misnumbered claim 38 been renumbered 40.

Misnumbered claim 39 been renumbered 41.

Misnumbered claim 40 been renumbered 42.

Misnumbered claim 41 been renumbered 43.

Misnumbered claim 42 been renumbered 44.

Misnumbered claim 43 been renumbered 45.

Misnumbered claim 44 been renumbered 46.

7.   Claim 36 (the 2nd claim 36 renumbered to 38): "new pixels" ought to be amended
to "new pixel".

Response to Arguments

8.   Applicant's arguments filed August 6, 2004 have been fully considered but they
are not persuasive.

Page 10, lines 10-13, the amendment states, "Edgar fails to disclose or suggest
such sub-regions and particularly fails to disclose or suggest specifying sub-regions
having such different characteristics pertaining to the presence or absence of defect
data."

However, Edgar does discloses such sub-regions (Fig. 7,num. 710 is an image
with two sub-regions as two shaded sub-regions.) and specifying sub-regions (Regions
are specifically "isolated" in col. 3, lines 59,60.) having such different characteristics
(The regions "have different characteristics that can be used to distinguish them...(col.
3, lines 61,62).") pertaining to the presence or absence of defect data (The
characteristics of a defect are distinguished using the characteristics in col. 3, lines 60-
62.).

9.   Applicant's arguments, see amendment, pages 10,11, filed August 6, 2004 with

respect to the rejection(s)of claim(s) 1 under Edgar (US Patent 6,075,590 A) have been

fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of

Edgar (US Patent 6,075,590 A).

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11.   Claims 1-3,5-9,11-13,17,19,23,24, and 26-46 are rejected under 35

U.S.C. 102(b) as being anticipated by Edgar (US Patent 6,075,590 A).

Regarding claim 1, Edgar discloses a method of removing an object from a digital

image (Fig. 7, num. 702 is a digital image that may be a color image in col. 12, lines 1-

5.) derived from digital image data (A red image is used to process a full color image in

col. 12, lines 1-5.) the method comprising:

a)   displaying the digital image (fig. 7, num. 702 is a displayed image.);

b)   specifying (Regions are specifically "isolated" in col. 3, lines 59,60.) a sub-

region (A sub-region or array of hair from fig. 7, numeral 706) of the displayed digital

image (fig. 7, num. 702) that contains at least a part of the object (The displayed digital

image of fig. 7, num. 702 contains a horizontal bold line as a defect.) and another sub-

region of the displayed digital image (The displayed digital image of fig. 7, num. 702

also contains a plurality of lighter vertical lines as the another sub-region or non-defect

that is separate from the object or horizontal bold line.) that does not contain the object

(A horizontal bold line of fig. 7,num. 702 is the object.);

      c)   identifying (Fig. 7, numerals 770:UPPER BOUND GAIN and 772: LOWER

BOUND GAIN are used to identify defects or the object in col. 11, lines 36-52 (Fig. 7,

numerals 776,748 and 780 contain dark regions that represent the object.) for removal

or "nulling defects" in col. 11, line 51.) the object to be removed (Fig. 7, num. 702 has a

bold horizontal line that will be removed.) by categorizing (A transform is used to

categorize or "distinguish" in col. 3, lines 64,65 "characteristics" in col. 3, lines 63,64 of

hair and a scratch in col. 3, line 60.) the digital image data (A red image is used to

process a full color image in col. 12, lines 1-5 for categorizing characteristics.) in the

sub-region (A region of hair from fig. 7, numeral 702) that contains at least a part of the

object (The displayed digital image of fig. 7, num. 702 contains a horizontal bold line.)

into an object region (Fig. 7, numerals 712,776,748 and 780 are the categorized or

distinguished images that are used to identify via fig. 7,num. 770 and 772 the object that

is represented by a shaded region on the left side of the images 712,776,748 and 780

that represents the horizontal bold line.) and a non-object region (Fig. 7, num. 710 is a

categorized or distinguished image via the transform that contains a shaded region on

the top side that represents a plurality of lighter vertical lines.);

d)   modifying (Fig. 7, num. 702 is modified or transformed into image 710.)

the digital image data (The red image is transformed in the image of fig. 7,num. 710.) of

the object region (a horizontal bold line of figure 7, num. 702) to more closely resemble

(Fig. 7, num. 758 shows an image where the object or horizontal bold line is removed to

resemble the non-object region or a plurality of lighter vertical lines.) the digital image

data (A red image is used individually to process a full color image in col. 12, lines 1-5

that contains the non-object regions or lighter vertical lines with the object region

removed as shown in fig. 7, num. 760.) of the non-object region (A plurality of lighter

vertical lines of fig. 7, numeral 706); and

e)   combining noise ("attenuated" image 742 in col. 7, line 33 to be

combined.) into the modified digital image data (The red image is transformed in the

image of fig. 7,num. 710 which is combined with the image of fig. 7, num. 742 via

numeral 744.) of the object region (The red image is transformed in the image of fig.

7,num. 710 that contains the object region represented as a shaded region on the left

side of fig. 7;num. 710.).

Regarding claim 2, Edgar teaches the method of claim 1 wherein the digital

image data is provided in a format that describes a perceptual color space (Edgar uses

a film that has yellow, magenta, and cyan dyes at col. 2, line 23,24)

Regarding claim 3, Edgar teaches the method of claim 2 wherein the perceptual

color space is selected from perceptual color spaces having a lightness component

(Edgar teaches that the scanner can obtain images that contain all light and dark

shades at col. 1, lines 49,50.)

Regarding claim 5, Edgar teaches the method of claim 2 wherein the object is a

defect (Fig. 7, a bold line depicted in numeral 706 is the defect).

Regarding claim 6, Edgar teaches the method of claim 5 wherein the defect (fig.

5, num. 506) is digital data (Fig. 5, num. 510 is an analog to digital converter) of a defect

in an original image (fig. 5, num. 502 and 504).

Regarding claim 7, Edgar teaches the method of claim 1 wherein the noise (An

"attenuated" image 742 in col. 7, line 33 to be combined.) is estimated (The attenuated

image 742 of fig. 7 is based on an estimate using fig. 7, num. 724: "ESTIMATE X" via

numerals 730 and 740.) from image data (Fig. 7,num. 712 is an image of the object or

horizontal bold line that is inputted to ESTIMATE X for estimating the attenuated image

of fig. 7,num. 742.) in [the] a vicinity (Fig. 7,num. 712 is an image that shows a vicinity

or white portion surrounding the object or horizontal bold line, represented as the

shaded region on the left of the image shown in fig. 7,num. 712.) of the object (The

displayed digital image of fig. 7, num. 702 contains a horizontal bold line.).

Claim 8 is rejected the same as claim 9. Thus, argument similar to that presented

below for claim 9 is equally applicable to claim 8.

Regarding claim 9, Edgar teaches the method of claim 3 wherein the noise (An

"attenuated" image 742 in col. 7, line 33 to be combined.) is estimated (The attenuated

image 742 of fig. 7 is based on an estimate using fig. 7, num. 724: "ESTIMATE X" via

numerals 730 and 740.) from digital image data in the vicinity (Fig. 7,num. 712 is an

image that shows a vicinity or white portion surrounding the object or horizontal bold

line, represented as the shaded region on the left of the image shown in fig. 7,num. 712.

) of the object (The displayed digital image of fig. 7, num. 702 contains a horizontal bold

line.), and the noise (An "attenuated" image 742 in col. 7, line 33 to be combined.) is

estimated (The attenuated image 742 of fig. 7 is based on an estimate using fig. 7, num.

724: "ESTIMATE X" via numerals 730 and 740.) by a process **of** sampling (Fig. 7,num.

720 is a sample of the larger image of fig. 7.num. 710.) the digital image data (A red

image is used to process a full color image in col. 12, lines 1-5 such as the image of fig.

7,num. 710.) from the digital image data (A red image is used to process a full color

image in col. 12, lines 1-5.) in the sub-region (The displayed digital image of fig. 7, num.

702 also contains a plurality of lighter vertical lines as the sub-region that is separate

from the object or horizontal bold line and is shown as the shaded region on the left side

of image 710 of fig. 710, which is inputted to fig. 7,num. 724: ESTIMATE X to generate

the attenuated image of fig. 7,num. 742.) that does not contain the object (A horizontal

bold line of fig. 7,num. 702.).

Claim 11 is rejected the same as claim 4. Thus, argument similar to that presented above for claim 4 is equally applicable to claim 11.

Regarding claim 12, Edgar teaches the method of claim 1 wherein object regions and non-object regions are designated by application of a threshold value (Edgar uses the infrared red spectrum to differentiate between infrared object and visible non-object regions) for at least one component (Infrared component) of the digital image data for a pixel.

Claims 13 and 19 are rejected the same as claim 12. Thus, argument similar to that presented above for claim 12 is equally applicable to claims 13 and 19.

Regarding claim 17 Edgar teaches the method of claim 1 wherein the noise is random noise (Edgar teaches reducing artifacts caused by irregularities and noise at col. 12, lines 59-61.).

Claims 23 is rejected the same as claim 17. Thus, argument similar to that presented above for claim 17 is equally applicable to claim 23.

Regarding claims 24,26 and 27, Edgar teaches a computer (fig. 1, num. 122) and software ("scan software" at col. 6, line 62) in the memory of the computer that can execute the process of claims 1,11 and 19, respectively.

Regarding claim 28, Edgar discloses the method of claim 1 wherein the

displaying operation (fig. 7, num. 702 is a displayed image.) comprises

displaying the digital image (fig. 7, num. 702.) to a user (The image of fig. 7,num. 702 is

displayed using figure 1 to a user via a computer 122 and arrow that points to images

132-142.), and the specifying operation (Regions are specifically "isolated" in col. 3,

lines 59,60.) comprises receiving input (Fig. 1,num. 120 is a cable that receives input for

the computer 122.) from the user (A user places an image that has object and non-

object region 102 of fig. 1.) specifying a location (Fig. 1, num. 114 is a location specified

by the user for inputting an image.) of a virtual frame (Fig. 7,num. 702 is a scanned

image of a photograph to create a virtual image of the photograph with a frame or an

edge as shown.) within the displayed digital image (The virtual frame and the displayed

digital image are one of the same.), the virtual frame (Fig. 7,num. 702) defining the sub-

region (A sub-region of hair from fig. 7, numeral 706) of the displayed digital image

(Fig. 7,num. 702) that contains the at least a part of the object (The displayed digital

image of fig. 7, num. 702 contains a horizontal bold line.) and the sub-region (The

displayed digital image of fig. 7, num. 702 also contains a plurality of lighter vertical lines

as the another sub-region that is separate from the object or horizontal bold line.) of the

displayed digital image (Fig. 7,num. 702) that does not contain the object (A horizontal

bold line of fig. 7,num. 702 is the object region.).

Claim 29 is similar to claim 1, thus the arguments of claim 1 are applicable to claim 29, except for the limitation of a computer program storage medium, which was, addressed in claims 24,26 and 27. Thus, arguments of claims 24,26 and 27 are applicable to claim 29.

Claims 30,35 and 43 are rejected the same as claim 28. Thus, argument similar to that presented above for claim 28 is equally applicable to claims 30,35 and [41].

Claim 31 is rejected the same as claims 1 and 28. Thus, argument similar to that presented above for claims 1 and 28 are equally applicable to claim 31.

Regarding claims 32 and 40, Edgar discloses the method of claim 31 wherein the defect sub-region (The displayed digital image of fig. 7, num. 702 contains a horizontal bold line as a defect.) is adjacent (The horizontal bold line is adjacent to a non-defect sub-region represented as lighter vertical lines as shown in fig. 7,num. 702.) to the non-defect sub-region (The displayed digital image of fig. 7, num. 702 also contains a plurality of lighter vertical lines as the another sub-region or non-defect that is separate from the object or horizontal bold line.) in the digital image (fig. 7, num. 702 is a displayed image.).

Regarding claims 33,34, 41 and 42, Edgar discloses the method of claim 31 wherein the array of interest (A sub-region or array of hair from fig. 7, numeral 706) is aligned with a column and row (A column and row of pixels 132, shown as crossed lines.) of pixels (Fig. 7,num. 706 is an "array of... pixels" in col. 1, lines 33,34.) in the digital image (fig. 7, num. 702 is a displayed image.).

Regarding claims 36 and 44, Edgar discloses the method of claim 31 wherein the defect sub-region (The displayed digital image of fig. 7, num. 702 contains a horizontal bold line as a defect.) and the non-defect sub-region (The displayed digital image of fig. 7, num. 702 also contains a plurality of lighter vertical lines as the another sub-region or non-defect that is separate from the object or horizontal bold line.) are defined (Regions are specifically "isolated" in col. 3, lines 59,60.) within a virtual frame (Fig. 7, num. 702 is a scanned image of a photograph to create a virtual image with a border or frame of the photograph with overlapping blocks in col. 7, lines 43-45.) that is visible over the digital image (fig. 7, num. 702 is a displayed image of overlapping blocks.).

Claim 39 is similar to claim 31, thus the arguments of claim 31 are applicable to claim 39, except for the limitation of a computer program storage medium, which was, addressed in claims 24,26 and 27. Thus, arguments of claims 24,26 and 27 are applicable to claim 39.

Claim 38 is rejected the same as claim 32. Thus, argument similar to that presented above for claim 32 is equally applicable to claim 38.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 4,10,18, and 25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Edgar (US Patent 6,075,590 A) in view of Ishida (US Patent

5,425,134 A).

Regarding claim 4, Edgar does not teach the selection of CIE L*u*v and CIE

L*a*b color spaces; however, using figure 2, Edgar does suggest using primary color

R,G,B, and infrared filters (num. 226,230,250) for selectively obtaining respectively

yellow, magneta, cyan color dyes and defects from a color film num. 206 that is inputted

to a A/D scanner 208 for later display on a kiosk (col. 1, lines 60-64 and col. 2, lines 20-

27,64,65).

However, Ishida, in the field of endeavor of color printing, teaches the use of CIE

L*u*v or CIE L*a*b color spaces provides a plurality of sets of the amounts of print color

materials of cyan, magenta, and yellow (CMY) at col. 3, lines 40-44.

It would have been obvious at the time the invention was made to one of ordinary

skill in the art to modify the CMY film of Edgar with the color spaces that provide CMY of

Ishida, because the color spaces of Ishida are "independent of the characteristics of an

output unit" such as a kiosk as taught by Edgar. Therefore the characteristics of a

computer kiosk will not affect the display of an image due to the color space of Ishida.

Claim 10 and 18 are rejected the same as claim 9. Thus, argument similar to that

presented above for claim 9 is equally applicable to claims 10 and 18.

Regarding claims 25, Edgar teaches a computer (fig. 1, num. 122) and software

("scan software" at col. 6, line 62) in the memory of the computer that can execute the

process of claim 4.

14.   Claims 14-16 and 20-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Edgar (US Patent 6,075,590) in view of Murakami (US Patent

5,982,946 A).

Claims 14,16 and 20-22 are rejected the same as claim 15. Thus, argument

similar to that presented below for claim 15 is equally applicable to claims 14,16 and 20-

22.

Regarding claim 15, Edgar teaches the method of claim 1 wherein the modifying

of the digital image data of the object region to more closely resemble the digital image

data of the non-object region includes a linear combination (Edgar teaches that the

upper right minus symbol of figure 12 is a linear combination of two images for defect

correction at col. 3, lines 39,40 and also mentions that the invention uses " any space"

including "Linear space" can be used with the invention in col. 7, lines 62,63.).

Edgar does not teach a linear combination of an interpolation of non-defect data

and of original image data.

However, Murakami, in the field of endeavor of image defect correction, does

teach a linear combination of an interpolation ("linear interpolation") of non-defect data

("normal pixels") and of original image ("defective pixel") data at col. 9, lines 36-42.

It would have been obvious at the time the invention was made to one of ordinary

skill in the art to modify Edgar's linear combination function with Murakami's teaching of

linear interpolation, because Murakami's linear interpolation "provides a greater effect of

suppressing incongruity with surrounding normal pixels and avoiding texture

deterioration in the digital image (Murakami, col. 9, lines 40-42)."

15.   Claim 37,38,45 and 46 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Edgar (US Patent 6,075,590 A) in view of Lawton et al. (US Patent

6,266,054 B1).

Regarding claim 37, referring to a dependent claim 37, Edgar does not teach the

limitation of claim 37, but does suggest a form of aligning or an image that is

"reinserted" into another image in col. 7, lines 39-42. Thus, the word "reinserted" can

suggest rotation to insert an image.

Lawton et al. does teach rotation as suggested by Edgar of a virtual frame that

has a central axis, the defect has a central axis, and further comprising:

a)   rotating the virtual frame (Fig. 4B, num. 68 is a series of frames rotated or

"oriented" in col. 6, lines 50-65.) to align the central axis (Fig. 11, label: "axis") of the

virtual frame (Fig. 11,num. 68) with the central axis of the defect (Fig.11, num. 69 is an

area with a "scratch" in col. 7, lines 6,7.).

It would have been obvious at the time the invention was made to one of ordinary

skill in the art to modify Edgar's teaching of reinserting images with Lawton et al.'s

orientation of images to insert images, because Lawton et al.'s orientation "has the

advantage of reducing the process of delineating the distortion...(Lawton et al., col. 7,

lines 1,2).") Thus, Edgar's teaching of inserting an image can be limited to areas that

contain defects using Lawton et al.'s teaching.

Regarding claim 38, Lawton et al. discloses the method of claim 37 wherein the

rotating operation defines a rotated virtual frame and comprises:

a)   sub-pixel sampling individual pixels (Fig. 9,num.86: FROM THE

NEIGHBORHOOD DETERMINE VALUES FOR A REPLACEMENT PIXEL where

"DETERMINES VALUES" is sub-pixel sampling pixels in a neighborhood of pixels.) in

the virtual frame (Fig. 11,num. 68) to define a corresponding new pixel[s] (fig. 9, num.

88: ADD REPLACEMENT PIXEL TO A CORRCTION SPRITE WHICH

CORRESPONDS TO THE DELINEATED DISTORTION) within the rotated virtual frame

(Fig. 4B, num. 68 is a series of frames rotated or "oriented" in col. 6, lines 50-65.).

Claim 45 is rejected the same as claim 37. Thus, argument similar to that

presented above for the first claim 37 is equally applicable to claim 45.

Claim 46 is rejected the same as the second claim 38. Thus, argument similar to

that presented above for the second claim 38 is equally applicable to claim 46.

Conclusion

16.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

17.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dennis Rosario-Vasquez whose telephone number is

703-305-5431. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Leo Boudreau can be reached on 703-305-4706. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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DANIEL MIRIAM
PRIMARY EXAMINER

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